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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,081	09/17/2003	Toshiya Uemura	T36-159070M/KOH	5081
21254	7590	09/02/2005	EXAMINER	
MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			JACKSON JR, JEROME	
			ART UNIT	PAPER NUMBER
			2815	

DATE MAILED: 09/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/664,081		UEMURA, TOSHIYA	
	<b>Examiner</b>		<b>Art Unit</b>	
	Jerome Jackson Jr.		2815	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-19 and 21-24 is/are rejected.
- 7) ☒ Claim(s) 10 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no detailed description of a device with a "plurality" of swollen portions. There is only detail for a single swollen portion. No figure shows more than one swollen portion. The bare language on page 14 line 17 "a plurality of swollen portions may be formed" is not adequate for one of ordinary skill to ascertain what the exact structure of a plurality is or would be. Applicant must submit a figure showing what a plurality of swollen portions would be. See also MPEP 2163.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "plurality of swollen portions" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure

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is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The exact structure of a "plurality" of swollen portions is vague and indefinite. There is no figure nor any direction in the original disclosure as to what the plurality structure would exactly comprise.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-9,12-14,16-19,21-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Jp '028.

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The previous rejection still applies. The new limitation "main surface" does not structurally distinguish over the applied art as '028 shows light emission from a "main" surface. Any surface from which there is light emission may be labeled a "main surface". It is a mere label not structurally distinguishing over the applied art. In regard to claims 5 and 6 note that the "swollen portion" of '028 supports directly or indirectly the center of gravity of the led or else the device would not be fixed to the support as it is. Claim 8 is rejected as a "plurality" of bonding wires is obvious for distributing current evenly and at a lower density and for dissipating heat. High power devices routinely practice multiple wirings. To one of ordinary skill the mere addition of multiple wirings to a device as '028 cannot be considered a patentable improvement. Claim 9 is rejected as '028 is directed to GaN material. See the abstract and 2<sup>nd</sup> paragraph of the detailed description.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over '028 in view of Krausse '686.

Krausse teaches multiple bond wires for lowering inductance, better heat dissipation, and other advantages. For the same advantages it would have been obvious to have added additional bonding wires to a '028 device as leds and lasers are known to operate with high current densities and consequently need large heat dissipation. Lower inductance is also an advantage with multiple bond wires.

Claims 10 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicant's arguments filed 6/28/05 have been fully considered but they are not persuasive. In regard to the 35 USC 112 1<sup>st</sup> paragraph rejection on enablement, the rejection has been slightly altered to lack of proper written description rather than enablement. Regardless of whether one of ordinary skill would be enabled to build a "plurality", there is a lack of written description on what applicant's plurality would exactly comprise. There is clearly a question of "undue experimentation" in determining what a plurality would be. A rejection under 2<sup>nd</sup> paragraph has also been applied as the "plurality" structure is vague and indefinite.

Arguments regarding '028 and a "main" light emitting surface are unpersuasive as any light emitting surface of '028 can be labeled a "main" light emitting surface. The bald term "main" is a mere label and does not structurally distinguish over '028. As applicant has stated there is light emission from upper and lower surfaces of the '028 device. Either surface may be arbitrarily labeled a "main" surface. There is no particular structure intrinsically associated with "main" which would in any way structurally distinguish over the light emitting surfaces of '028.

Arguments regarding the "center of gravity" limitation in claim 5 are not persuasive because the "swollen portion" of '028 supports substantially the center of gravity of the led or else the device would not be fixed in place on the "swollen portion" as it is.

Arguments regarding Kneissl are moot.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerome Jackson Jr. whose telephone number is 571-272-1730. The examiner can normally be reached on M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on 571-272-1664. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jj

  
JEROME JACKSON  
PRIMARY EXAMINER